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ABSTRACT

This newsletter issue documents the number of children and adolescents participating in sports and examines gender differences, barriers to participation, and benefits of sports participation. The largest number of participants is enrolled in agency-sponsored programs (45 percent), followed by recreational programs (30 percent). Gender data reveal that there is a persistent gap in youth sports enrollment figures between males and females, and that the lack of female coaches to serve as role models, counselors, and mentors of young girls in sports may discourage girls from participating in organized sports. Other barriers to participation include: restrictions on team membership, the organizational structure of sports in the United States, lack of competent volunteer coaches, and overzealous promoters. Benefits of youth sports participation include: better health through increased activity and skill-building; social development; moral development, especially with regard to delinquency and aggressive behavior; and deterring negative behavior such as gang membership. The report concludes with 13 recommendations to improve youth participation in sports. Tables present data on the percentage of youth enrolled in specific categories of sports; a survey of 1994-95 athletics participation; continued participation by age and sport; and pronouncements of professional organizations regarding youth sports. (Contains 96 references.) (ND)

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YOUTH SPORTS IN AMERICA: AN OVERVIEW

President's Council on Physical Fitness and Sports

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Research Digest

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YOUTH SPORTS IN AMERICA: An Overview

Introduction

Participation in organized sports has become a common rite of childhood in the United States. In the early part of the twentieth century, agencies began sponsoring sports and recreational activities to provide wholesome leisure-time pursuits, initially designed to keep boys out of trouble. Schools sponsored intramural sports programs to provide instruction in sports skills, plus an opportunity to engage in controlled, competitive activities. Although educators, parents, child welfare workers and leaders of agency-sponsored sports programs do not always agree about the benefits and the objectives of youth sports programs, the notion of providing wholesome, character-building activities to occupy the leisure time of children and youth, to enable them to make the transition from childhood to adulthood (Berryman, 1996), has become an accepted view.

Prior to 1954, most of the organized sports experiences for children and youth occurred within social agencies such as the YMCAs/YWCAs, Boys and Girls Clubs, and Boy Scouts and Girl Scouts (LeUnes & Nation, 1989). Since 1954, the opportunities for youth to participate in sports have moved from social agencies and activities organized by the youth themselves to adult-organized programs. This movement towards adult-organized sports activities for youth was associated with the advent of Little League Baseball by Carl Stutz in 1954 (Hale, 1956) with approximately 70,000 participants (Skubic, 1955). By 1989, there were 2.5 million children, aged eight to twelve, playing baseball on more than 42,000 teams in 28 countries.

While the number of youth involved in organized sports programs is impressive, the opportunities to engage in sports programs are unequal across genders and social classes. Greater opportunities exist among the children who grow up in middle and upper classes where resources enable adults to sponsor, organize, and administer programs for their children (Ponessa, 1992).

The rise of organized sports opportunities for girls has increased dramatically since the passage of Title IX in 1972. Although still fewer in overall participation, the number of female participants continues to rise as variables such as opportunity for involvement, valuing of sports as part of total development and overall fitness for girls and women has increased.

The association between the involvement of children and youth in organized sports and their health and academic achievements are placed in perspective by a brief overview of youth sports in America, the characteristics of current youth sports programs and an account of the participation and attrition patterns in sports programs of American youth. The paper concludes with recommendations regarding the sponsorship and implementation of youth sports programs so that more children and youth are able to benefit from the programs' ultimate potential.

Participation in Organized Youth Sports in America

Types of Youth Sports Programs

The term *youth sports* in American culture has been applied to any of the various athletic programs that provide a systematic sequence of practices and contests for children and youth (Seefeldt, Ewing, & Walk, 1991). In reality, these sports experiences differ greatly in competitive level, length of season, cost to competitors, qualifications of coaches and officials, and skill levels of athletes. For the purpose of this paper, six categories of youth sports programs have been

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defined: namely, *agency-sponsored programs, national youth service organizations, club sports, recreation programs, intramural programs and interscholastic programs*. Of these six categories, four are community-based and two are conducted within the schools.

Brief definitions of the various categories of youth sports are described under the category descriptions in Table 1. Also displayed in Table 1 are the estimated percent and number of participants in each of the six categories. Note that by far the largest percent of participants are enrolled in agency-sponsored programs (45%), followed by enrollees in recreational programs (30%). These two categories of involvement also represent the fastest growing segments of the youth sports scene.

the participation of a higher proportion of the potential enrollees. Quite likely, each of these possibilities has contributed to the greater involvement of youth in agency-sponsored sports programs.

Gender Equity in Youth Sports

Among the many forms of sexism in sports, perhaps the most pervasive and devastating is the lack of equal opportunities for girls to compete in programs similar to those offered for boys. Despite the tremendous gains in sports participation made by girls and women during the last 30 years, there is still a persistent gap in the enrollment figures between males and females. Data at the interscholastic level (see Table 2) indicate that the total

Table 1. Estimated Percent of Youth Enrolled in Specific Categories of Youth Sports.*

Category of Activity	Percent of All Eligible Enrollees ^a	Approximate N of Participants
Agency-Sponsored Sports (i.e., Little League Baseball, Pop Warner Football)	45	22,000,000
Club Sports (i.e., pay for services, as in gymnastics, ice skating, swimming)	5	2,368,700
Recreational Sports Programs (everyone plays—sponsored by recreational departments)	30	14,512,200
Intramural Sports (middle, junior, senior high schools)	10	451,000
Interscholastic Sports (middle, junior, senior high schools)	12 ^b 40 ^c	1,741,200 5,776,820

* Total population of eligible participants in the 5-17 year age category in (1995) was estimated to be 48,374,000 by the National Center for Education Statistics, U.S. Department of Education, 1989.

(a) Total does not equal 100 percent because of multiple-category by some athletes.

(b) Percent of total population aged 5-17 years.

(c) Percent of total high school-aged population (N=14,510,000).

Participation Rates

Projections from the National Center for Education Statistics (1989) indicated a slight increase by 1995 in the potential number of 5-13 year old youth sports participants and a slight decline in the potential number of 14-17 year old participants. These data suggest that any increases in youth sports participation are due to changes within a relatively stable pool. Potential explanations are that the increase is due to one of the following: (1) a shift from participation in the less competitive recreational programs to the agency-sponsored programs that have national affiliations, and wherein participants are more likely to be counted in reports of participation; (2) greater recruitment and involvement of the younger-aged clients; or (3) program sponsors are providing greater accessibility to youth sports, resulting in

participation of girls is currently only 39 percent of the total participation in interscholastic athletics. The encouraging news is that there has been a slow but steady climb toward equity in the percent of female participants, from 32 percent of the males' participation in 1973-74 to 63 percent in 1994-95.

The gains in participation by girls at the interscholastic level since 1972 seem to be a direct reflection of participation rates in non-school, agency-sponsored sports. A survey of non-school sports participation (N = 94,500) in 1978 (Michigan Joint Legislative Study on Youth Sports) reported that the ratio of girls to boys was 3:5. In a nationwide sample involving 26,600 participants (Ewing & Seefeldt, 1989), the ratio of girls to boys was

Table 2. Athletics Participation Survey, 1994-95*

Year	Boy Participants	Year	Girl Participants	Total	Percent of Boys Total
1971-72	3,666,917	1971-72	294,015	3,960,932	1
1972-73	3,770,621	1972-73	817,073	4,587,694	2
1973-74	4,070,125	1973-74	1,300,169	5,370,294	32
1975-76	4,109,021	1975-76	1,645,039	5,754,060	40
1977-78	4,367,442	1977-78	2,083,040	6,450,482	48
1978-79	3,709,512	1978-79	1,854,400	5,563,912	50
1979-80	3,517,829	1979-80	1,750,264	5,268,093	50
1980-81	3,503,124	1980-81	1,853,789	5,356,913	53
1981-82	3,409,081	1981-82	1,810,671	5,219,752	53
1982-83	3,355,558	1982-83	1,779,972	5,135,530	53
1983-84	3,303,599	1983-84	1,747,346	5,050,945	53
1984-85	3,354,284	1984-85	1,757,884	5,112,168	52
1985-86	3,344,275	1985-86	1,807,121	5,151,396	54
1986-87	3,364,082	1986-87	1,836,356	5,200,438	55
1987-88	3,425,777	1987-88	1,849,684	5,275,461	54
1988-89	3,416,844	1988-89	1,839,352	5,256,196	54
1989-90	3,398,192	1989-90	1,858,659	5,256,851	55
1990-91	3,406,355	1990-91	1,892,316	5,298,671	56
1991-92	3,426,853	1991-92	1,940,801	5,367,654	57
1992-93	3,416,389	1992-93	1,997,489	5,413,878	58
1993-94	^a 3,478,530	1993-94	^a 2,124,755	5,603,285	61
1994-95	^b 3,536,359	1994-95	^b 2,240,461	5,776,820	63

Source: National Federation of State High School Associations, Kansas City, MO, 1995.

(a) Total does not include 11,698 participants in coeducational sports

(b) Total does not include 17,609 participants in coeducational sports

also 3:5. Some of the disparity in participation is attributable to a later entry of girls into organized sports. The average age for initial participation on an organized sports team for boys was age eight, while the mean age of entry for girls was age 10. Moreover, the dropout rate of girls at younger ages was higher than that of boys, especially when co-ed composition of teams was mandated.

The greatest disparity in the youth sports scene is in the ratio of women to men who coach these young athletes. In 1978 (Michigan Joint Legislative Study on Youth Sports), the female-to-male ratio of coaches in Michigan was 1:9. Although figures for the gender of coaches in agency-sponsored sports are not available at the national level, there is no reason to believe that this is a local occurrence. At the interscholastic and intercollegiate levels, where the motto once was "women coaches for girls' and women's sports," the percent of women who coach girls' sports has dropped dramatically from 90 percent in 1972 to 50 percent in 1987 (Women's Sports Foundation, 1989). These data indicate that the lack of women coaches to serve as role models, counselors and mentors of young girls in sports may be a subtle but formidable barrier to the entry and continued participation of girls in organized sports.

Other Barriers to Participation

Restricted Sports Offerings

The suggestion that barriers to participation in youth sports constitute a national dilemma may seem like a paradox to the casual observer of the national scene. Newspapers, journals, radio and television constantly remind us of America's obsession with sports. However, closer scrutiny reveals that sports in America represent a highly exclusionary process, with only the elite performers accorded a share of the spotlight. The headlines fail to account for the millions of young people who seek to participate or who would continue in organized sports were it not for the restrictions that are inherent in the adult version of highly-organized competitive sports for children. In fairness to the several million adults who annually volunteer to coach youth sports, it is only through the efforts of these volunteers that youth sports are able to record their annual record-breaking participation rates.

One aspect of the youth sports scene that is obscured by the impressive enrollment figures are the players known as "drop outs." Those who cease their participation before the season ends, for whatever reason, disappear

from the statistics on youth sports unless someone makes a concerted attempt to determine why they left their specific sports affiliation. Such an investigation was conducted by Ewing and Seefeldt (1989), who determined the percent of individuals who had stopped their enrollment in a specific sports during the previous year. The percent of attrition, by sports, as shown in Table 3, reveals that the attrition was well underway at age 10 and reached its peak at ages 14-15. The highest rates of early drop out occurred in gymnastics and the latest rate occurred in football. These data are cross-sectional in nature and reflect only attrition from a single sports, per student. Data about the athlete's subsequent sports participation after he/she ceased to participate in the sports of reference were not obtained nor did the investigators learn how many other sports were played by the athletes who "dropped out" of the specific sports.

aspiration (Carnegie Council on Adolescent Development, 1990; Duda, 1985) throughout the high school years. Paradoxically, the prestige associated with team membership at the interscholastic level may dissuade those who fail to "make the team" from participating in less prominent activities such as intramural or recreational leagues.

Competence of Volunteer Coaches

Approximately 2.5 million adults annually volunteer their time as coaches of youth sports teams (Martens, 1984). Most of these coaches are adults who leave coaching as soon as their children cease to be interested or eligible for additional sports competition. Impressive as this volunteer work force is in its dedication to the needs of youth, it is insufficient in magnitude and com-

Table 3. Percent of Participants, By Age, Who Indicated That They Will Not Play Next Year, a Sports They Played This Year

Sports	10	11	12	13	14	15	16	17	18
Baseball	8.5	12.5	14.9	14.0	13.9	13.8	9.7	6.6	2.7
Basketball	5.0	6.8	11.5	13.8	19.4	18.6	11.5	8.3	3.3
Football	3.3	8.1	9.6	12.1	14.8	17.7	13.4	13.3	5.6
Gymnastics	10.6	17.1	17.1	15.0	13.2	11.9	5.7	3.9	1.7
Softball	6.3	11.1	13.5	12.5	15.8	16.9	10.0	8.2	2.7
Swimming	9.7	14.7	12.8	12.1	14.1	11.3	10.9	8.3	2.5
Tennis	6.0	12.0	11.6	14.6	12.3	16.0	10.5	8.8	5.3
Volleyball	2.9	5.4	10.0	12.6	22.2	18.5	13.4	10.2	2.9
Wrestling	6.2	7.6	9.2	9.7	12.9	17.7	12.9	15.2	6.6
Ice Hockey	2.9	6.7	11.5	19.2	15.4	10.6	15.4	12.2	4.8

*Source: Ewing, W. & Seefeldt, V. (1989). Participation and Attrition in American Youth Sports. Report to the Sporting Goods Manufacturers Association, North Palm Beach, Florida.

Another barrier corroborated by these figures, is that the restrictions of team membership and sports offerings per season at the interscholastic level reduce the total number of participants in youth sports by at least 50 percent from their previous involvement at the pre-interscholastic level. This reduction of sports activity, per capita, is especially apparent in large high schools, where membership in some sports is limited by rules, budget, space and personnel. Thus, smaller schools are likely to have a much higher percent of their student body involved in athletics than the larger schools.

Scrutiny of the events that are associated with enrollments of youth in sports reveals that the organizational structure of sports in the United States—and not a lack of interest on the part of potential enrollees—is primarily responsible for the reduction in participation at age 14 and beyond. Data from several studies reveal that membership on a sports team remains a highly desirable

petence to provide the knowledge, skills and supervision required by the estimated 38 million youths whose sports participation depends on volunteer coaches.

There is common agreement that the quality of the youth sports experience depends on the competence of the adult leaders; most specifically, the coach. Thus, educational programs for volunteer coaches would seem to be in demand, but such is not the case. At least four generic programs for coaches exist at the national level and numerous other sports-specific programs are in existence through sports with national-affiliations (Campbell, 1993; Feigley, 1988). Yet, the vast majority of youth sports coaches, estimated to be as high as 90 percent, have no formal education in coaching techniques, first aid, injury prevention or emergency care (Kimiecki, 1988; Milne, 1990; Partlow, 1995; Seefeldt, 1992; Sieget & Newhof, 1992). Clearly, the mandatory education of coaches to meet at least the first level of

competency as stated in the **National Standards for Athletic Coaches** (National Association for Sports and Physical Education, 1995) will have an immediate, beneficial effect on the sports experiences of millions of children.

Overzealous Promoters

The problems of overzealous coaches and parents are so prevalent in youth sports that dozens of books and

countless articles have been written to counteract this undue influence. The list of books ranges from teaching coaches and parents how to assess talent (Amot & Gaines, 1986), to teaching pediatricians about youth sports injuries (Micheli, 1984), to information about the epidemiology of sports injuries (Caine, Caine & Lindner, 1996). In addition, no fewer than 20 position statements (see Table 4) have been issued by professional organizations, addressing precautions that should apply to the sports participation of children and youth.

Table 4. Pronouncements of Professional Organizations Regarding Youth Sports

Organization	Year	Title	Purpose/Focus
American Academy of Pediatrics	1989	Organized Athletics for Pre-Adolescent Children	Lists the safeguards that should accompany children's sports.
American Academy of Pediatrics	1988	Recommendations for Participation in Competitive Sports	Lists medical conditions that would disqualify children from athletic competition.
American Academy of Pediatrics	1983	Weight Training and Weight Lifting: Information for the Pediatrician	A conservative assessment of the benefits and risks of weight lifting and weight training
American Academy of Pediatrics	1982	Climatic Heat Stress and the Exercising Child	Documents the special problems of children when exercising in hot-humid environment.
American Academy of Pediatrics	1982	Risks of Long-Distance Running x for Children	Provides guidelines for involving children in long-distance running.
American Academy of Pediatrics	1981	Competitive Sports for Children of Elementary School Age	An update of their position statement in 1968.
American Academy of Pediatrics	1981	Injuries to Young Athletes	Presents the special problems of young athletes in competitive sports.
American Academy of Pediatrics	1973	Athletic Activities for Children with Skeletal Abnormalities	Outlines the conditions under which children with specific conditions can and should not be involved in athletics.
American College of Sports Medicine	1996	Exercise and Fluid Replacement	Reviews the effects of dehydration and hydration on human performance.
American College of Sports Medicine and American College of Cardiology	1994	Recommendations for Determining Eligibility for Competition in Athletes with Cardiovascular Abnormalities	Provides an extensive set of papers that review the various abnormalities and makes recommendations to physicians.
American College of Sports Medicine	1993	The Prevention of Sports Injuries of Children and Adolescents	Suggests that fifty percent of current injuries could be prevented with proper techniques.
American College of Sports Medicine	1984	The Use of Anabolic-Androgenic Steroids in Sports	Documents the adverse effects of anabolic x steroidson the human body.
American College of Sports Medicine	1982	The Use of Alcohol in Sports	Reviews the literature on the influence of alcohol on human performance.
American College of Sports Medicine	1979	The Participation of the Female Athlete in Long-Distance Running	Documents that female athletes should not be denied opportunities for long-distance running.
American College of Sports Medicine	1976	Weight Loss in Wrestlers	Warns of the dangers of personal health when excessive weight loss is incurred.
American Heart Association	1986	Coronary Risk Factor Modification in Children: Exercise	Reviews ways to combat the sedentary lifestyles of children.
American Medical Association	1975	Female Athletes	An early and outdated version of athletic competition for girls and women.
International Federation of Sports Medicine	1991	Excessive Physical Training in Children and Adolescents	Provides guidelines and examples of activities that are to be avoided in children's training for athletic competition.
Michigan Governor's Council on Physical Fitness, Health and Sports	1995	The Importance of Physical Activity for Children and Youth (Pivarnik)	Provides the scientific basis for physical activity in childhood and adolescence; Advocates policies for families, communities, public health and schools.
National Strength and Conditioning Association	1985	Prepubescent Strength Training	Documents the benefits and risks of strength training for prepubescent children. Provides guidelines for parents and coaches.

The rationale for the increased intensity of training and the extended duration of seasons in youth sports stems from the assumption that optimal performance can only be achieved after prolonged periods of practice.

However, the data on burnout (Coakley, 1992; Rowland, 1986; Ward, 1982) and attrition (Burton, 1988; Gould, 1987) support the contention that for almost all of the youthful aspirants, these periods of intensive training have no justifiable physiological, psychological or educational basis (International Federation of Sports Medicine, 1991). Even those who survive these rigorous sessions and go on to Olympic fame may have long-lasting physical and psychological consequences resulting from intensive training (Coakley, 1992).

There is common agreement that sports programs for children and youth can enhance motoric, physical and social growth. However, when training sessions become so intensive that they result in social isolation, disempowerment and permanent injuries (Coakley, 1992) then one must question their motives and tactics. Ironically, there are child labor laws in many countries that forbid stereotype work movements and excessive loading (International Federation of Sports Medicine, 1991; Roberts, 1995), but these same restrictions do not apply to children's sports. Fortunately, the numerous position statements by such organizations as the American Academy of Pediatrics (1981a, 1981b, 1982a, 1982b, 1983, 1988, 1989) and the American College of Sports Medicine (1984, 1988, 1993) have provided guidance to parents and promoters of sports for children regarding unacceptable practices. Recommendations designed to obtain desirable outcomes accompany the statements of objectionable practice.

Benefits of Youth Sports Participation

Youth Sports and Health

The recent Surgeon General's Report on Physical Activity and Health (1996) clearly documents the benefits of regular physical activity to the health of adults and youth alike. Because sports is a major type of activity in which youth are involved, it can be considered a viable method of promoting good health. Sports that are considered to be "lifetime" in nature are especially important in meeting national health objectives. In March of 1997 the Centers for Disease Control and Prevention (CDC) published "Guidelines for Schools and Communities for promoting Lifelong Physical Activity." The guidelines note the benefits of regular physical activity in childhood and adolescence: improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, increases self-esteem, and may improve blood pressure and cholesterol levels. The guidelines also indicate that community sports and recreation pro-

gram coordinators can help increase physical activity among youth in a variety of ways including providing a "mix of competitive team and non competitive, lifelong fitness and recreational activities," increase public facilities, and insure coaches are competent.

Though youth sports programs can provide a role in increasing physical activity and in contributing to the health of youth, others have to be involved. The CDC guidelines suggest roles for groups other than sports programs. Parents, school administrators, teachers, coaches and the general public all can play a role. Prominent in the report is the role of physical education in the promotion of active lifestyles among children and adolescents. While the numbers of youth involved in sports are relatively constant, the same cannot be said for school physical education programs. Physical education programs are being eroded or eliminated to make room for curricular offerings that are deemed to be more useful especially for high school students—a level at which participation is especially low compared to other age levels (Seefeldt, 1996). Although many parents regard youth sports as a suitable substitute for physical education classes, there are major differences in offerings, instruction, outcomes, and inclusion of participants. Ideally, the physical education programs should provide the basis of fundamental movement skills, appropriate physical activity behavioral development and physical fitness attributes so students can pursue a wide variety of physical interests, including various sports.

Lack of a motor basis from which to compete successfully with peers in organized sports relegates all but the motorically gifted and physically fit aspirants to the sidelines (Pivarnik, 1995; Tyler, 1991). If the discretionary time of young individuals is not devoted to positive skill-building activities, including the abilities to participate in the games, dances and sports of one's culture, then the potential for involvement in numerous socially-unacceptable behaviors is increased (Farrell, 1990; Hechinger, 1992; Robbins, 1991; Takanishi, 1993). The inability or unwillingness of adults to provide for constructive experiences in sports during the leisure hours of youth looms as a formidable barrier, but it must be addressed in order to provide a more positive environment for children to learn the skills of a diverse society (Seefeldt, 1995).

Youth sports can play a significant public health role, as a provider of physical activity for children and adolescents alike. However, as noted above, youth sports cannot be the sole contributor to this effort. It will take the efforts of many programs including regular school physical education programs if all youth are to benefit from the health benefits that regular physical activity can provide.

Sports and Social Development

Sports can provide excellent educational opportunities for social development because many of the social and moral requirements for participation in sports are parallels to how individuals must function in a law-abiding society. Because sports are so highly valued in the American culture, many parents believe that children should be exposed to organized sports at an early age. Participation in sports alone does not result in the development of positive social and emotional characteristics. The positive development of youth in organized sports can only be derived through sports experiences that foster positive experiences and minimize negative experiences.

Psychological readiness for competition occurs when children have the desire to compare skills with others and thereby acquire information about themselves, which is a primary attraction of sports participation for youngsters (Passer, 1988; Roberts, 1980). A second aspect of psychological readiness occurs when a child reaches a level of cognitive maturity that allows her or him to understand the competitive process (Passer, 1988). Understanding the competitive process entails an appreciation of the social nature of competition, particularly with regard to the cooperative and strategic aspects of sports and an awareness of the nature of individual roles within a cooperating group (Brustad, 1993). Coakley (1986) stated that children are generally attracted by the excitement of sports before they have developed a mature conception of sports.

With respect to the readiness to compare skills with others, children do not generally begin to actively compare their abilities with others until they are at least 5 or 6 years old. However, until the age of 8 or 9, children lack the cognitive ability to use information about an experience to make sophisticated comparisons. Until the age of 8 or 9, children tend to rely on objective outcomes, such as winning or losing, and upon adult feedback to provide them with information about personal ability in sports (Horn & Hasbrook, 1986, 1987; Horn & Weiss, 1991). Research also indicates that prior to adolescence, there is only a very weak correlation between children's perceptions of competence and their actual competence as assessed by teachers or coaches (Horn & Weiss, 1991; Nicholls, 1978).

Psychological readiness also involves the mature conception of the social nature of competition. Coakley (1986) argued that children couldn't fully benefit from competitive situations until they have the capacity to understand their roles in relation to the roles of others within this context. Selman (1971, 1976) suggested that it is not until the age of 8 to 10 years that children develop the necessary role-taking abilities to allow them to

understand another person's point of view. This ability to understand another's point of view is necessary for one to cooperate effectively with others.

Premature sports involvement may result in undesirable emotional consequences for children. The limited capacity of children to develop accurate conceptions of ability may result in inappropriate aspirations and achievement goals (Passer, 1988). When expectations for performance are too high, children are likely to experience frustration, discouragement and low self-esteem (Brustad, 1993). Roberts (1980) contended that children are not able to develop realistic achievement goals until they can make appropriate attributions for outcomes. A mature attributional capacity will not be present until children can differentiate between ability, task difficulty and effort in influencing performance.

Youth Sports and Moral Development

Whether participation in sports contributes to moral development remains unresolved. Shields and Bredemeier (1995) suggested that the physical behaviors of sports are not in themselves moral or immoral. In addition, the experiences that children have in sports are far from uniform. The physical act of performing sports skills will not teach moral action. However, the potential does exist to enhance moral development through the social interactions associated with involvement in sports. The evidence for and against sports as contributing to moral development will focus on the areas of delinquency and aggression.

Delinquency

In what has now become a classic work on adolescents, Coleman (1965) wrote that "if it were not for interscholastic athletics or something like it, the rebellion against school, the rate of drop-out, and the delinquency of boys might be far worse than they presently are" (pp. 44-45). Considerable evidence has been presented that sports participants are less likely than non-participants to engage in delinquent behavior (Donnelly, 1981; Hastad, Segrave, Pangrazi, & Peterson, 1984; Melnick, Vanfossen, & Sabo, 1988; Segrave, 1983; Segrave & Hastad, 1982). The negative relationship between sports participation and delinquency tends to be stronger among lower-class youth (Buhrman & Bratton, 1978; Schafer, 1969; Segrave & Chu, 1978) and athletes in minor sports (Segrave & Hastad, 1982). Unfortunately, the reason for this negative correlation is unclear.

Many attempts have been made to try to explain why the negative relationship exists between delinquency and sports involvement. Sports may deter delinquency by encouraging less frequent, shorter or less intense interaction with deviant others (Hastad, et. al., 1984; Segrave & Hastad, 1982). Schafer (1971) proposed that

the values emphasized in the sports context—such as teamwork, effort and achievement—tend toward conventionality and, therefore, may discourage the legitimization of delinquent behavior. The fact that sports involvement reduces the amount of unstructured time and that sports fosters a belief that hard work can lead to just rewards may also influence the negative relationship.

Being labeled an athlete may contribute to the decrease in delinquency, but not necessarily in a positive way. Purdy and Richard (1983) reported that athletes who engage in the same delinquent behavior as non-athletes may escape the negative label of "delinquent," may be treated less harshly by the courts and may have sufficient alternative positive labels to escape self-labeling as "delinquent."

Participation in sport has been used as a treatment for delinquency with some success. Trulson (1986) matched 34 delinquent teenage boys on age, socio-economic background and test scores on aggression and personality adjustment and then divided the youth into three groups. One group received traditional Tae Kwon Do training, which combined philosophical reflection, meditation and physical practice of the martial arts techniques. The second group received "modern" martial arts training, emphasizing only fighting and self-defense techniques. The third group ran and played basketball and football. These groups met for one hour three times a week for six months. Results revealed that members of the Tae Kwon Do group were classified as normal rather than delinquent, scored below normal on aggression and exhibited less anxiety, increased their self-esteem and improved their social skills. The modern martial arts group scored higher on delinquency and aggression and was less well adjusted than when the experiment began. The traditional sports group showed little change on delinquency and personality measures, but their self-esteem and social skills improved. The findings support the notion that whatever advantages or liabilities are associated with sport involvement, they do not come from sport per se, but from the particular blend of social interactions and physical activities that comprise the totality of the sport experience.

Aggression

The debate continues as to whether sports contributes to increased aggression among athletes and spectators or whether sports provides an arena for the release of aggression in a socially acceptable outlet. The debate may actually be a moot one as the incidences and intensity of learned aggression vary considerably between sports, and, within a given sports, from one region of the country to another, and from one level of competition to another (M.D. Smith, 1983). Most of the research supports the notion that aggression in sports is learned.

Two generalizations should be made before discussing the concepts of moral action and aggression. First, male athletes are generally found to be more aggressive than female athletes (Bredemeier, 1984; Silva, 1983; M.D. Smith, 1983). In addition, males tend to express and accept more aggression than females (Hyde, 1986). Again, these data would suggest that aggression in sports, as well as controlling one's aggression, is a learned behavior.

The relationship of moral action to aggression has received very limited attention. The work of Bredemeier and Shields is particularly noteworthy in this area. Bredemeier (1985) reported that athletes with more mature moral reasoning were less approving of aggressive tactics than those with less mature moral reasoning. In addition, athletes with "principled" moral reasoning scores were rated as significantly less aggressive by their coaches (Bredemeier & Shields, 1986). Finally, in a study of sports camp participants, Bredemeier, Weiss, Shields and Cooper (1987) showed children slides of potentially injurious sports acts and asked the children questions designed to reveal their perceptions of legitimacy. Results revealed that children with less mature moral reasoning judged a significantly greater number of aggressive acts to be legitimate than their more mature peers. Bredemeier et. al., concluded that children who perceive an act as injurious are probably more likely to engage in it than children who judge it to be illegitimate. The findings support the notion that aggression is a learned behavior and that if one teaches youth about moral reasoning, one could reduce instances of aggression.

Youth Sports as a Deterrent to Negative Behavior

Along with the positive outcomes of learning sports skills and enhanced personal characteristics, youth sports can also act as a deterrent to negative behavior. The role of sports as a safe alternate activity to violence and intimidation is gaining interest due to increasing concern with flourishing gang membership. Youth sports, specifically, may be considered a venue for reflecting or shaping society's acceptance or disapproval for violence and aggression. There has been an abundance of research on the causes of aggression and violence in sports. At the heart of the debate is whether sports can offer a socially acceptable arena for aggressive behavior or whether the aggressive nature of sports fosters violent behavior.

Participation in sports by youth is a highly desirable alternative for gang membership. Society's current attention on the destructive nature of youth gang involvement has prompted much research over the past two decades. Historically, conditions for the foundation

of gangs have been familiar to the inner city: poverty, racial division, broken families and high unemployment (Stover, 1986). Current information on gangs has involved the identification of other conditions for gang membership such as age (Parks, 1995) and inter-/intra-personal conflicts (Curry, 1992). Furthermore, gang activity is no longer isolated in the inner city, but has infiltrated many suburban and rural communities. For example, Los Angeles reported 200,000 gang members in 1991. Chicago spent \$7 million on anti-gang efforts, and gangs have infiltrated Albuquerque, Phoenix and Milwaukee. What is more alarming is that contemporary gangs are more violent than earlier gangs are (Evans, 1995) indicating that the problem is getting worse and more dangerous. Where gangs of the 1960s were more concerned with fist fights over "turf," contemporary gangs are involved in drug trafficking and the use of weapons, including an arsenal of assault rifles.

Reasons identified for initial gang membership include a combination of family, school and personal conflicts as reported by juvenile delinquents (Clark, 1992; Fukada, 1991). Alienation from family and peers included lack of companionship, support or social interaction. Reported problems in school were poor grades and discipline issues. Personal struggles included low self-esteem and self-worth. Furthermore, the lack of a positive role model was a differentiating factor of gang and non-gang members (Wang, 1994) indicating the importance of positive role models in the lives of youth. Non-gang members were three times more likely to mention a teacher or parent as a role model. Furthermore, the absence of a role model was the best predictor of gang membership, which corroborates other research suggesting that intrafamilial socialization and parental support are among the most significant determinants of gang membership (Johnstone, 1983).

The reasons for continued membership in a gang have also been well documented. Gang membership provides affiliation, self-worth, companionship and excitement (Clark, 1992). The gang fills a void in a youth's life that was created by the environmental and inter-/intra-personal conflicts discussed above. Once joining a gang, the youth develops a responsibility to the other members, as well as a duty to help the gang prosper. The gang also provides a self-identity or valued role which reinforced by the group, such as the provider, whose "job" is to obtain money gang use by burglary or drug dealing (Vigil, 1988). No gender or racial discrimination has been shown in gang membership (Figueira-McDonough, 1986) dispelling the widely held notion that gangs are comprised largely of African-American males. An increasing number of females, as well as Hispanics, Asians and Caucasians are now involved in gang membership.

Youth sport participation is a practical substitute for gang membership. Initiation into sports at a young age allows for a positive filling of the void in a youth's life at a critical stage. Early intervention is recommended as a tool to curb delinquent behavior which would most likely continue over a lifetime (Laub, 1994). The highest rate of criminal offenders with chronic anti-social behavior began involvement in crime at an earlier age than offenders with shorter and lower incidence careers. Continued intervention is crucial in the lives of youth who are facing a pivotal choice about whether or not to join a gang. Delinquent behavior by gang members was shown to be lower before and after gang membership, showing the positives for decreasing criminal activity outside of the gang (Thornberry, 1993). The focus has been on prevention and intervention strategies; however, once in a gang, getting out may not be the easiest task to achieve. However, leaving the gang is a consideration of many members (Hochhaus & Sousa, 1988). Peer pressure was identified by current gang members as the most important reason for not leaving a gang. Some members expressed dissonance when asked to take part in stealing, drug dealing or violence, but the peer pressure outweighed the guilt. The desire to leave is the most promising of avenues for youth sports to reach young people who have already joined the gang. Offering an alternate activity that provides the same qualities as gang membership should become part of the recruitment strategy for youth sports.

Summary

Within this report, the number of children and adolescents participating in sports, difference in gender among participants, barriers to participation, and many of the benefits of sports participation have been documented. It is clear that participation in youth sports can have many benefits for the individual and for our society in general. It is also clear that sports is a double edge sword in that negative consequences may result if programs are not well run. Proper education of coaches, limiting the influence of overzealous promoters, and paying attention to important guidelines outlined by various professional associations are all factors which can help sports programs have optimal benefits for youth. Based on the information presented in this paper, and our extensive experience working with youth sports programs, some recommendations are proposed in effort to enhance the potential for youth sports in meeting the needs of ALL youth, regardless of age, gender, ethnicity, or ability.

Recommendations

- Children should be exposed to a broad array of sports opportunities during their elementary years.
- When possible, youth should be exposed to sports that have potential for lifetime use.
- Early childhood involvement in sports should emphasize instruction more than competition.
- Sports programs must re-evaluate their programs and institute equitable programs that will meet the needs of all youth.
- Coaches must be encouraged to teach young athletes responsibility, independence and leadership so that they are better prepared for everyday life.
- Sports organizations can provide an alternative to gang membership and violence by providing opportunities for more youth to be involved and thereby benefit from being a member of a pro-social team.
- Sports organizations should make a commitment to increasing the number of women and minority coaches in youth sports programs.
- Public policy makers must become educated about the significance of youth sports in the non-school lives of youth. Dedicated revenues for sports programs are an uncommon, but necessary, means to avoid the fluctuations in funding by private and public funders.
- Programs must be designed so that they revitalize communities as partners in the delivery of sports programs.
- Communities must improve the condition and maintenance of facilities and sites so that they are attractive and safe for children and families.
- A broad-based organization that unites the public/private sector of a city should be established to plan, develop, coordinate, maintain and evaluate the municipality's comprehensive youth sports program.
- Sports organizations should provide educational programs for all coaches of youth sports teams.
- Sports organizations should provide education to parents about the roles of parents of youth sports participants, the use of appropriate feedback and the positive and potentially negative aspects of participation in sports.

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Physical Activity and Fitness Quote

“Although sports are not viewed
as a panacea for society’s ills,
sports participation that emphasizes
skill-building and socially acceptable responses
to personal relations has proven to be
a popular aid in the education of youth.”

Vern D. Seefeldt, Ph.D.
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REFERENCES

- American Academy of Pediatrics (1981a). Competitive sports for children of elementary school age. *The Physician and Sportsmedicine*, 9, 140-142.
- American Academy of Pediatrics (1981b). Injuries to young athletes. *The Physician and Sportsmedicine*, 9, 107-110.
- American Academy of Pediatrics (1982a). Diastolic heart stress and the exercising child. *Pediatrics*, 89, 808-809.
- American Academy of Pediatrics (1982b). Risks of long-distance running for children. *Pediatric News and Comment*, 33, 11.
- American Academy of Pediatrics (1983). Weight training and weight lifting: Information for the pediatrician. *The Physician and Sportsmedicine*, 11, 157-162.
- American Academy of Pediatrics (1986). Recommendations for participation in competitive sports. *Pediatrics*, 81, 737-739.
- American Academy of Pediatrics (1989). Organized athletics for pre-adolescent children. *Pediatrics*, 84, 583-584.
- American College of Sports Medicine (1984). The use of anabolic-androgenic steroids in sports. *Sports Medicine Bulletin*, 13-18.
- American College of Sports Medicine (1988). Physical fitness in children and youth. *Medicine and Science in Sports and Exercise*, 20, 422-423.
- American College of Sports Medicine (1993). The prevention of sports injuries of children and adolescents. *Medicine and Science in Sports and Exercise*, 25, S1-S7.
- Amot, R., & Ganes, C. (1986). *Sports event*. New York, NY: Penguin Books.
- Berryman, J. (1996). The rise of boys' sports in the United States: 1960 to 1970. In F. Smoll & R. Smith (Eds.), *Children and youth in sports: A biopsychosocial perspective*. Dubuque, IA: Brown & Benchmark.
- Bredemeier, B. J. (1984). Sports, gender and moral growth. In J. M. Silva & R. S. Weinberg (Eds.), *Psychological foundations of sports* (pp. 400-413). Champaign, IL: Human Kinetics.
- Bredemeier, B. J. (1985). Moral reasoning and the perceived legitimacy of intentionally injurious sports acts. *Journal of Sports Psychology*, 7, 110-124.
- Bredemeier, B. J., Shields, D. L. (1986). Athletic aggression: An issue of contextual morality. *Sociology of Sports Journal*, 3, 15-28.
- Bredemeier, B. J., Weiss, M. R., Shields, D. L., & Cooper, B. (1987). The relationship between children's legitimacy judgments and their moral reasoning, aggression tendencies and sport involvement. *Sociology of Sport Journal*, 4, 48-60.
- Brustad, R. J. (1993). Youth in sports: Psychological considerations. In R. N. Singer, M. Murphree, & L. K. Tennant (Eds.), *Handbook of research on sports psychology* (pp. 695-717). New York: Macmillan Publishing Co.
- Buhrman, H. G., & Bratton, R. (1978). Athletic participation and status of Alberta high school girls. *International Review of Sports Psychology*, 12, 57-67.
- Burton, D. (1988). The dropout dilemma in youth sports: Documenting the problem and identifying the solutions. In R. Maines (Ed.), *Young athletes: Biological, psychological and education perspectives* (pp. 245-266). Champaign, IL: Human Kinetics Publishers.
- Caine, D., Caine, C., & Lindner, K. (Eds.). (1996). *Epidemiology of sports injuries*. Champaign, IL: Human Kinetics Publishers.
- Campbell, S. (1993). Coaching education around the world. *Sports Science Review*, 2, 62-74.
- Carnegie Council on Adolescent Development (1990). *A matter of time: Risk and opportunity in the nonschool hours*. Executive summary. New York: Carnegie Corporation of New York.
- Clark, C. M. (1992). Deviant adolescent athletes: Assessment strategies and clinical interventions. *Adolescence*, 27, 106-283-293.
- Coakley, J. (1986). When should children begin competing? A sociological perspective. In M. R. Weiss & D. Gould (Eds.), *Sports for children and youths* (pp. 59-63). Champaign, IL: Human Kinetics.
- Coakley, J. (1992). Burnout among adolescent athletes: A personal failure of social problem? *Sociology of Sports Journal*, 9, 271-285.
- Coleman, J. S. (1965). *Adolescents in the schools*. New York, NY: Basic Books.
- Curry, G. D. (1992). Gang involvement and delinquency among Hispanic and African American adolescent males. *Journal of Research in Crime & Delinquency*, 29, 13-29.
- Donnelly, P. (1981). Athletes and juvenile delinquents: A comparative analysis based on a review of the literature. *Adolescence*, 16, 415-431.
- Duda, J. L. (1985). Goals and achievement orientations of Anglo and Mexican-American adolescents in sports and the classroom. *International Journal of Intercultural Relations*, 9, 131-150.
- Evans, J. P. (1995). Understanding violence in contemporary and earlier gangs: An exploratory application of the theory of reasoned action. *Journal of Black Psychology*, 21, 1-18.
- Ewing, M. E., & Seefeldt, V. (1996). Participation and attrition patterns in American agency sponsored youth sports. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sports: A biopsychosocial perspective* (pp. 31-46). Dubuque, IA: Brown and Benchmark.
- Farrall, E. (1990). *Harvesting and dropping out*. New York, NY: Teachers' College Press, Columbia University.
- Fegley, D. (1988). *Comparative analysis of youth sports educational programs*. New Brunswick, NJ: Rutgers Youth Sports Research Council.
- Figueroa-McDonough, J. (1986). School context, gender, and delinquency. *Journal of Youth and Adolescence*, 15, 79-88.
- Fukaya, J. (1991). The relation between family functioning and the independence of juvenile delinquents. *Japanese Journal of Criminal Psychology*, 28, 11, 19-36.
- Gortmaker, S., Dietz, W., & Cheung, L. (1990). Inactivity, diet and the fattening of America. *Journal of the American Dietetic Association*, 90, 1247-1252.
- Gould, D. (1987). Understanding attrition in children's sports. In D. Gould & M. Weiss (Eds.), *Advances in pediatric sports science* (pp. 61-86). Champaign, IL: Human Kinetics.
- Halle, C. J. (1995). Physiological maturity of Little League baseball players. *Research Quarterly*, 27, 276-284.
- Haskell, W. L. (1995). Physical activity in the prevention and management of coronary heart disease. *Physical Activity and Fitness Research Digest*, 1-7. President's Council on Physical Fitness and Sports, Washington, DC.
- Hastad, D. N., Seagrave, J. O., Pangraz, R., & Peterson, G. (1984). Youth sports participation and deviant behavior. *Sociology of Sports Journal*, 1, 366-373.
- Hochmeyer, F. (1992). *Fateful choices: Healthy youth for the 21st century*. New York, NY: Hill & Wang.
- Hochhaus, C., & Sousa, F. (1988). Why children belong to gangs. *The High School Journal*, 71(2), 74-77.
- Horn, T. S., & Hasbrook, C. A. (1986). Information components influencing children's perceptions of their physical competence. In M. R. Weiss & D. Gould (Eds.), *Sports for children and youths* (pp. 81-88). Champaign, IL: Human Kinetics.
- Horn, T. S., & Hasbrook, C. A. (1987). Psychological characteristics and the criteria children use for self-evaluation. *Journal of Sports Psychology*, 9, 208-221.
- Horn, T. S., & Weiss, M. R. (1991). A developmental analysis of children's self-evaluation judgments in the physical domain. *Pediatric Exercise Science*, 3, 310-320.
- Hyde, J. S. (1986). Gender differences in aggression. In J. S. Hyde & M. C. Linn (Eds.), *The psychology of gender: Advances through meta-analysis* (pp. 51-66). Baltimore, MD: John Hopkins University Press.
- International Federation of Sports Medicine (1991). Position statement: Excessive physical training of children and adolescents. *Clinical Journal of Sports Medicine*, 1, 262-264.
- Johnstone, J. W. (1983). Recruitment to a youth gang. *Youth and Society*, 14, 281-300.
- Kumeda, J. (1988). Who needs coaches' education? U.S. coaches do. *The Physician and Sportsmedicine*, 16, 124-136.
- Kuntzman, C. T., & Reff, G. (1992). The decline of American children's fitness levels. *Research Quarterly for Exercise and Sports*, 63, 107-111.
- Laub, J. H. (1994). The precursors of criminal offending across the life course. *Federal Probation*, 58(3), 51-57.
- LeRues, A. D., & Naton, J. H. (1993). *Sports psychology: An introduction*. Champaign, IL: Human Kinetics.
- Maines, R. (1995). Physical activity and fitness of children and youth: Questions and implications. *Medicine, Exercise, Nutrition and Health*, 4, 123-135.
- Martens, R. (1984). Youth sports in the U.S.A. In M. Weiss, & D. Gould (Eds.), *Sports for children and youths* (Chapter 5, pp. 27-33). Champaign, IL: Human Kinetics Publishers.
- Menick, M. J., van'thoven, B. E., & Sabo, D. F. (1988). Developmental effects of athletic participation among high school girls. *Sociology of Sports Journal*, 5, 22-36.
- Micheli, L. (1984). Sports injuries in the young athlete: Questions and controversies. In L. Micheli (Ed.), *Pediatric and adolescent sports medicine*. Boston: Little, Brown & Co. Michigan Joint Legislative Study on Youth Sports: 1975. State of Michigan Lansing, MI.
- Mine, C. (1990). High education for coaches: Preparation survey results. *Journal for physical education, Recreation and Dance*, 61, 44-46.
- National Association for Sports and Physical Education (1995). *National standards for athletic coaches*. Reston, VA: National Association for Sports and Physical Education.
- National Center for Education Statistics (1989). *Projections of educational statistics to 2000*. Washington, DC: U.S. Department of Education.
- Parks, C. P. (1995). Gang behavior in the schools: Reality or myth? *Educational Psychology Review*, 7, 1, 41-6.
- Pattison, K. (1995). Interscholastic coaching: From accidental occupation to profession. Champaign, IL: American Sports Education Programs.
- Passer, M. W. (1988). Psychological issues in determining children's age-readiness for competition. In F. L. Smoll, R. A. Magill, & M. J. Ash (Eds.), *Children in sports* (2nd ed., pp. 203-227). Champaign, IL: Human Kinetics.
- Pharmak, J. (1995). *The importance of physical activity for children and youth*. Lansing, MI: Michigan Governor's Council on Physical Fitness, Health and Sports.
- Ponessa, J. (1992). Student access to extracurricular activities. *Public Affairs Focus*, 23, 1-8. Princeton, NJ: Public Affairs Research Institute.
- Purdy, D. A., & Richard, S. F. (1983). Sport and juvenile delinquency: An examination and assessment of four major theories. *Journal of Sport Behavior*, 6, 179-193.
- Roberts, D. (1991). *The future by design*. (DHHS Publication No. [ASM] 91-1760). Washington, DC: U.S. Printing Office Superintendent of Documents.
- Roberts, G. C. (1980). Children in competition: A theoretical perspective and recommendations for practice. *Motor Skill Theory into Practice*, 4, 37-50.
- Roberts, J. (1995). Child labour: A form of modern slavery. In *The way forward: Conference on human rights* (pp. 35-42). Vevey, Switzerland.
- Rowland, T. (1986). Exercise fatigue in adolescents: Diagnosis of athlete burnout. *The Physician and Sportsmedicine*, 14, 69-72.
- Schaffer, W. E. (1969). Participation in interscholastic athletics and delinquency: A preliminary study. *Social Problems*, 17, 40-47.
- Schaffer, W. E. (1971). *Sports, socialization, and the school: Toward maturity of enculturation*. Paper presented at the Third International Symposium on the Sociology of Sports, Waterloo, ON.
- Seefeldt, V. (1992). Coaching certification: An essential step for the renewal of a faltering profession. *Journal for Physical Education, Recreation and Dance*, 63, 29-30.
- Seefeldt, V. (1995). *Recreating recreation and sports in Detroit: Hamtramck and Highland Park. Final report to the Skillman Foundation*. Detroit, MI: The Skillman Foundation.
- Seefeldt, V. (1996). Physical activity is no substitute for physical education. *Journal for Physical Education, Recreation and Dance*, 67, 10-11.
- Seefeldt, V., Ewing, M. E., & Walk, S. (1991). Overview of youth sports in the United States. Paper commissioned by the Carnegie Council on Adolescent Development.
- Seagrave, J. O. (1983). Sports and juvenile delinquency. In R. Terjung (Ed.), *Exercise and sports sciences review*, 2, 16-209.
- Seagrave, J. O., & Chiu, D. B. (1978). Athletics and juvenile delinquency. *Review of Sports and Leisure*, 3, 1-24.
- Seagrave, J. O., & Hastad, D. (1982). Delinquent behavior and interscholastic participation. *Journal of Sports Behavior*, 5, 96-111.
- Selman, R. L. (1971). Taking another's perspective: Role-taking development in early childhood. *Child Development*, 42, 1721-1734.
- Selman, R. L. (1976). Social-cognitive understanding: A guide to educational and clinical practice. In T. Lickona (Ed.), *Moral development and behavior* (pp. 259-316). New York: Holt, Rinehart & Winston.
- Shields, D. L., & Bredemeier, B. J. (1995). Character development and physical activity. Champaign, IL: Human Kinetics.
- Siegel, D., & Heywood, C. (1992). What should it take to be a coach? *Journal for Physical Education, Recreation and Dance*, 63, 60-63.
- Silva, J. M. (1983). The perceived legitimacy of rule violating behavior in sports. *Journal of Sports Psychology*, 5, 436-448.
- Skubie, C. (1995). Emotional responses of boys to Little League and Middle League competitive baseball. *Research Quarterly*, 26, 342-352.
- Smith, M. D. (1983). *Violence and sports*. Toronto: Butterworths.
- Storv, D. (1986). A new breed of youth gang is on the prowl and a bigger threat than ever. *American School Board Journal*, 69, 19-21.
- Takashi, R. (1993). *Adolescence in the 1990s: Risk and opportunity*. New York, NY: Teachers' College Press.
- Thompson, T. P. (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime & Delinquency*, 30(1), 55-87.
- Truon, M. E. (1996). Martial arts training: A novel "cure" for juvenile delinquency. *Human Relations*, 39, 1131-1147.
- Tyler, J. (1991). *The serious business of play: A focus on recreation in the Milwaukee agenda*. Public Policy Forum, 633 W. Wisconsin Avenue, Milwaukee, WI.
- Vigor, J. D. (1986). Group processes and street identity: Adolescent Chicano gang members. *Ethos*, 16(4), 421-445.
- Wang, A. Y. (1994). Pride and prejudice in high school gang members. *Adolescence*, 29(114), 279-291.
- Ward, D. (1982). *Burned out: Sports and Athletics*, 5, 48-51.
- Women's Sports Foundation (1989). *The Women's Sports Foundation Report: Minorities in sports*. New York, NY: Women's Sports Foundation.

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